



15 May 2015

Attention: Mr Chris Pattas,  
General Manager - Networks Branch  
Australian Energy Regulator  
GPO Box 520  
Melbourne VIC 3001  
mailto: [TASelectricity2017@er.gov.au](mailto:TASelectricity2017@er.gov.au)

Dear Sir,

**Response to AER: Tasmanian Framework and Approach preliminary positions**

I refer to the AER's preliminary positions on a replacement framework & approach published on 2 April 2015 (AER reference: AC 046/15) with an invite for submissions by 15th May 2015.

Yours Sincerely,

A handwritten signature in black ink that reads "Marcus Steel". The signature is written in a cursive style.

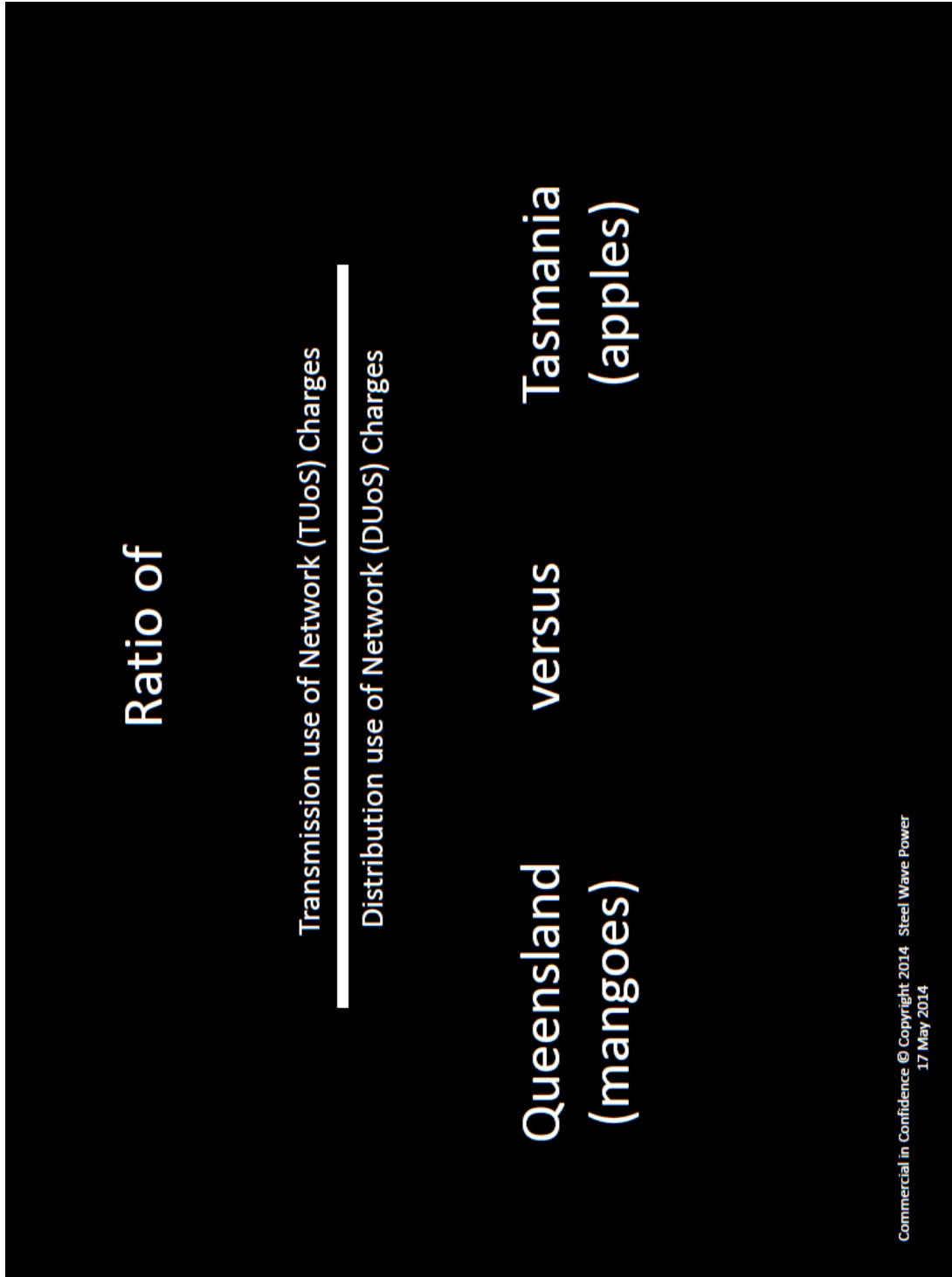
Marcus DW Steel  
**Principal Application Engineer**  
**Steel Wave Power (SWP)**  
**ABN: 72044918897**

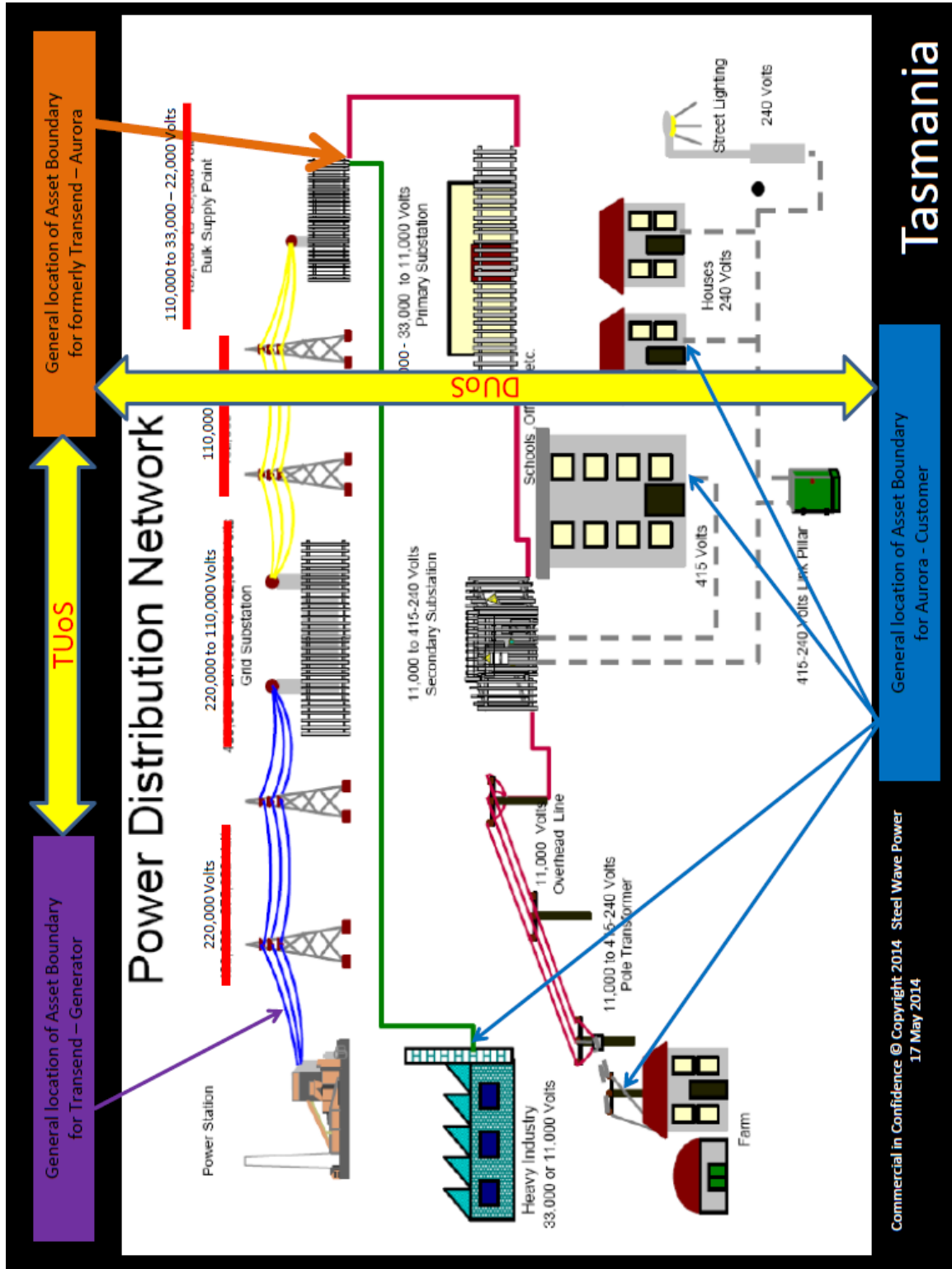
References:

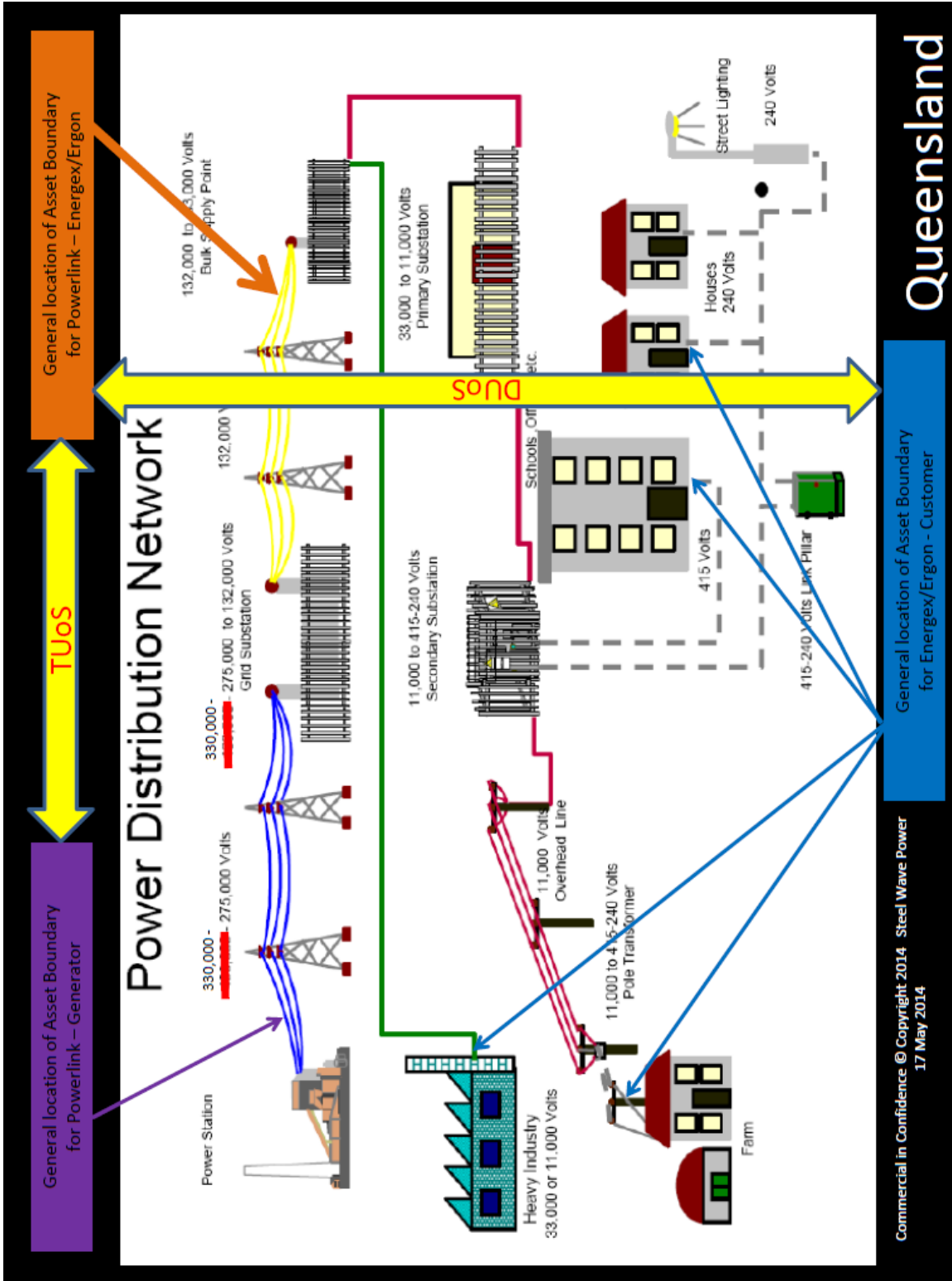
- a) Review of RO Banding for Small-Scale Renewables; A Report for the Department of Enterprise Trade and Investment; January 2014, Final Report; Prepared by: Cambridge Economic Policy Associates and Parsons Brinckerhoff
- b) Development of a Small Scale Feed-In Electricity Tariff for Northern Ireland; Northern Ireland Department of Enterprise, Trade and Investment; June 2013, Final Report; Submitted by: Cambridge Economic Policy Associates (CEPA) Ltd; In association with: Sinclair Knight Merz (SKM)
- c) Determination of the Appropriate Form of Support for Incentivising the Development of Renewable Electricity Generation in Northern Ireland; The Department of Enterprise, Trade and Investment and Northern Ireland Authority for Utility Regulation; August 2010, Final Report; Submitted by: Cambridge Economic Policy Associates Ltd in association with Parsons Brinckerhoff

**Attachment 2 - Steel Wave Power's Response to AER:  
Tasmanian Framework and Approach preliminary positions**

**The interpretation of the TUoS in the 'framework & approach'**







**How TUoS subsidises under-signalling the locational and operational incentives resulting in higher costs for consumers of electricity.**

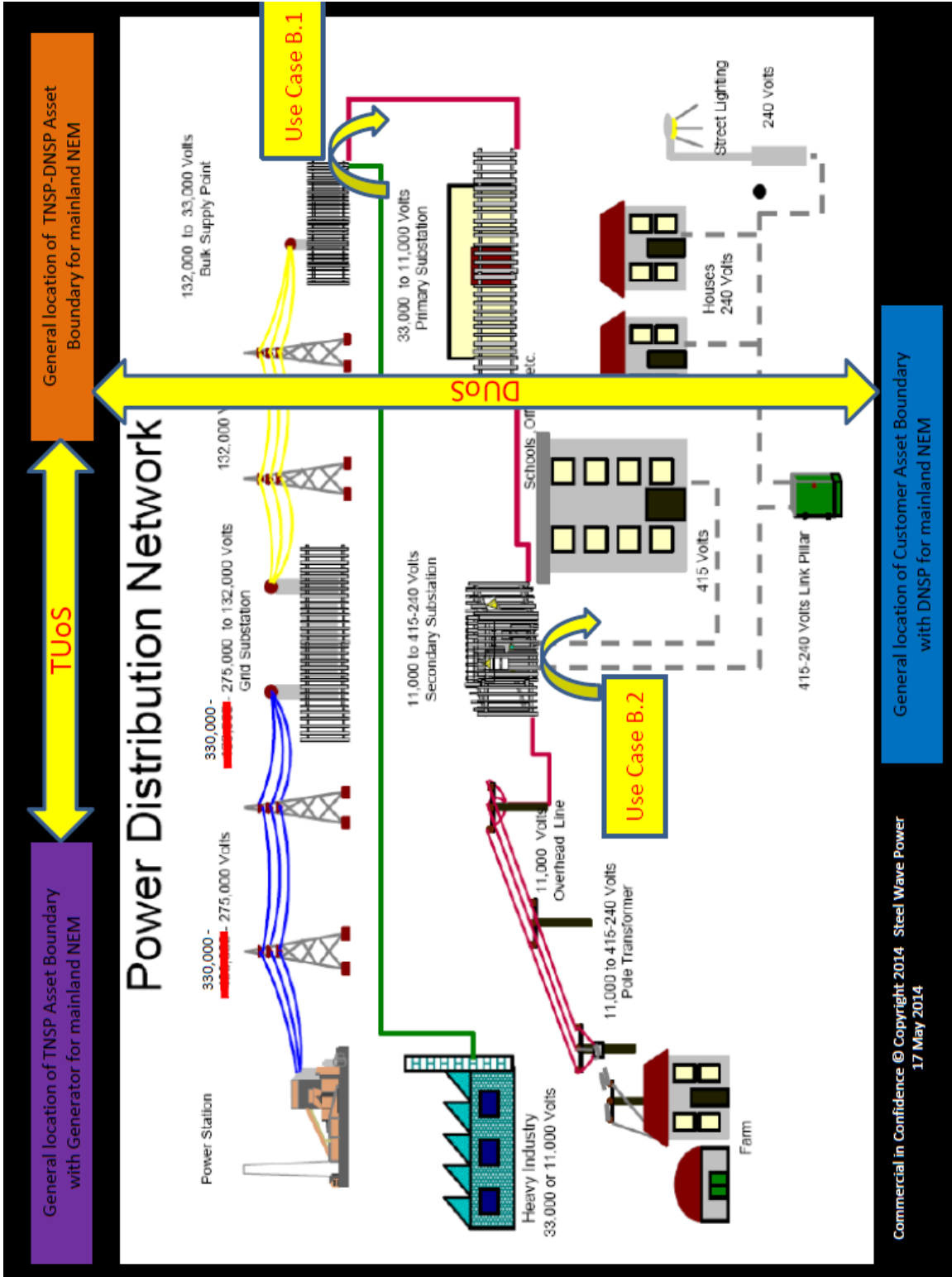
**Use Case B.1 –**

generation in distribution network that will interact with and support the integration of domestic renewable DG and advanced loads (eg. electric scooters).

**Use Case B.2 –**

generation in distribution network that will facilitate efficient community side participation by supporting the integration of domestic renewable DG and advanced storage.

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17 May 2014



General location of TNSP- DNSP Asset Boundary for mainland NEM

TUoS

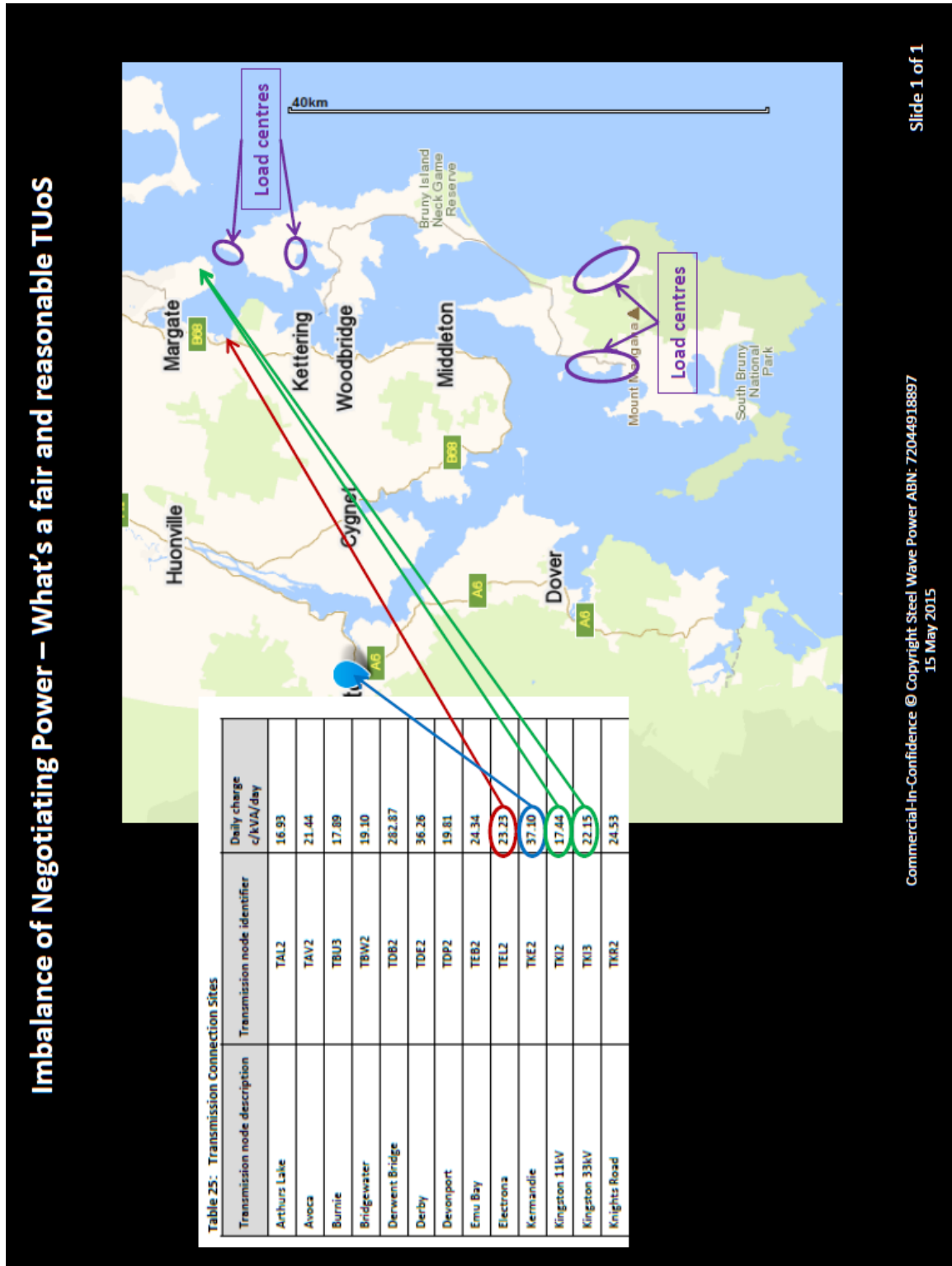
General location of TNSP Asset Boundary with Generator for mainland NEM

# Power Distribution Network

General location of Customer Asset Boundary with DNSP for mainland NEM

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17 May 2014

# Imbalance of Negotiating Power



Imbalance of Negotiating Power – What’s a fair and reasonable TUOs

Slide 1 of 1

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15 May 2015



## MEDIA RELEASE

### MARTIN FERGUSON

Minister for Resources and Energy  
Minister for Tourism

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26 October 2012

#### ISLAND OF INNOVATION

One of the first power systems in the world to provide a reliable, off-grid power supply by integrating renewable energy sources with enabling and storage technologies is one step closer on King Island in Tasmania.

Minister for Resources and Energy, Martin Ferguson AM MP, today joined Tasmanian Premier Lara Giddings to witness the commissioning of Hydro Tasmania's uninterruptible power supply system as part of the \$45 million King Island Renewable Energy Integration project.

The Australian Government is supporting the project through more than \$15 million in Australian Renewable Energy Agency (ARENA) funding.

Minister Ferguson said this innovative project will integrate wind and solar energy along with biodiesel fuelled generators to supply more than 90 percent of King Island's power requirements from renewable energy sources. Currently, power on the Island is provided by a single power station running four diesel generators.

"Some of the best renewable resources are found in remote and off-grid environments in Australia," Minister Ferguson said.

"The new Diesel Uninterruptible Power Supply will allow existing diesel generation to be completely shut off during high wind periods and allow for 100% renewable energy penetration.

"The King Island Renewable Energy Integration project will demonstrate to other off-grid and remote users how renewable technologies can be integrated and managed rather than relying on diesel alone.

"These projects, relying on wind or solar PV, are often cost competitive with diesel generation."

This project has captured significant international attention, particularly from Pacific Island and Southeast Asian countries, where the learning from the project could benefit other off-grid and stand-alone power systems.

"It is a great example of what the Australian Renewable Energy Agency (ARENA) has been set up to do: lower the costs of renewable and enabling technologies by demonstrating their competitiveness in the market," Minister Ferguson said.

The project is expected to be completed by the end of 2013.

ARENA is a \$3.2 billion Australian Government commitment to improve the competitiveness of renewable energy technologies and increase the supply of renewable energy in Australia. It is part of the Government's Clean Energy Future package. Further information about ARENA at [www.arena.gov.au](http://www.arena.gov.au)

Media contact: Elyse Gatt – 0407 198 136



**Subject:** World-leading technology to power Flinders Island

4 March 2015

Tasmanian innovation will see the majority of Flinders Island's energy needs supplied by renewable energy within two years. Hydro Tasmania will soon start work on developing a "Hybrid Energy Hub" on Flinders Island that will significantly increase renewable energy use on the island and reduce the use and importation of diesel.

"Like many remote or island locations, Flinders Island is currently heavily reliant on expensive diesel fuel to supply its electricity needs," said Project Director Simon Gamble.

"Diesel fuel remains the single largest expense in these remote systems and using renewable energy makes good economic sense."

Development of the Hybrid Energy Hub follows the success of the King Island Renewable Energy Integration Project (KIREIP), which has seen King Island's energy needs supplied solely from renewables when conditions allow, a world-leading breakthrough.

KIREIP uses a range of renewable and conventional technologies to reduce diesel consumption for power generation on the island. The hybrid power system is comprised of wind, solar, battery storage, flywheels, dynamic resistor technology, dynamic load control and the use of biofuels.

"This combination of technologies means KIREIP can securely and reliably generate power for King Island, even during lulls in the wind or when the sun isn't shining. When conditions are right, KIREIP delivers 100 per cent of King Island's power from renewable sources, reducing the cost of providing electricity to the island," Mr Gamble said.

Supported by up to \$5.5 million funding from the Australian Renewable Energy Agency (ARENA), the \$12.88 million Flinders Island project is the next step in off-grid hybrid system development. The hybrid system will be capable of displacing up to 60% of the annual diesel fuel used on the island to generate electricity.

It involves integration of wind and solar generation with the existing diesel power station, and installation of enabling technology, such as flywheel and battery energy storage, in a new form designed to drive down the cost of these systems. Hydro Tasmania's has worked with Tasmanian manufacturers to develop a series of modular units to house and ship the enabling technologies essential to the energy solution. This innovation will be developed and tested for the first time through the Flinders Island Hybrid Energy Hub project.

These modular enabling units will provide a lower-cost and scalable solution that will allow easy and rapid transport and installation for renewable energy projects, and which could also serve temporary uses such as in disaster relief or in the mining industry.

Fabrication and testing of equipment takes place off-site, ensuring a speedy roll-out at the final location, reducing the risk, cost and duration of construction.

"The combination of our hybrid energy solution and the state's skilled fabrication industry positions Tasmania well to supply these hybrid systems to a growing market throughout our region," Mr Gamble said.

One such opportunity is Energy Developments Limited's Coober Pedy project, incorporating wind, solar and enablers, which aims to achieve a 70 per cent reduction in diesel fuel used for power supply to the township of Coober Pedy. Hydro Tasmania has been assisting EDL with the development phase of this project which would make use of the Tasmanian designed and manufactured modular enabling units if it proceeds to implementation.

The Flinders Island Hub project is due for completion in November 2016.

Ends

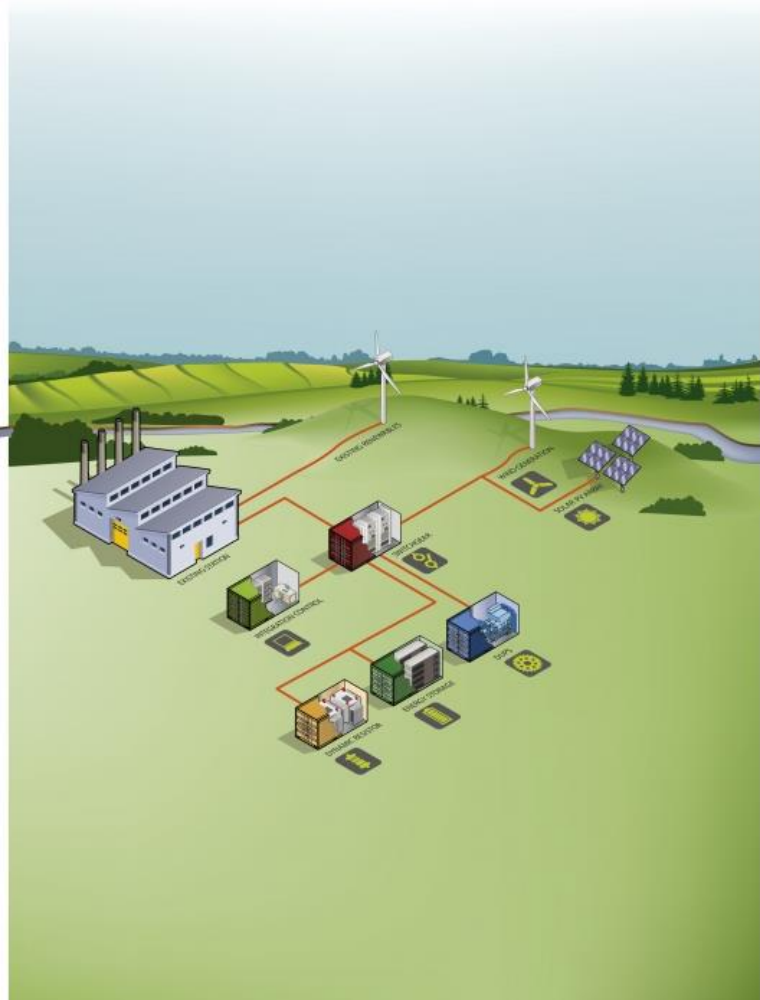
Released by Samantha Meyer, (03) 6230 5746

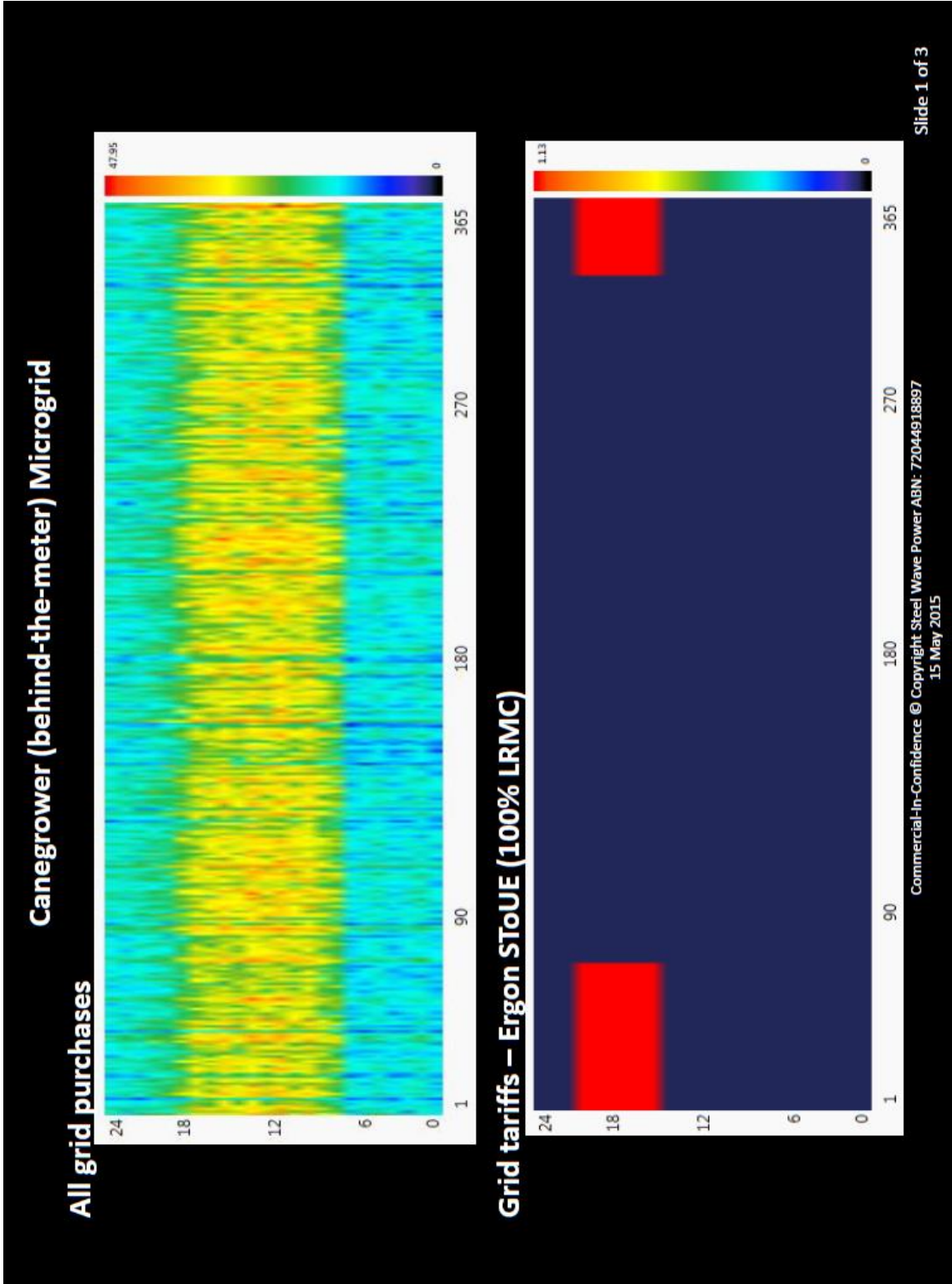
## The level playing field objective

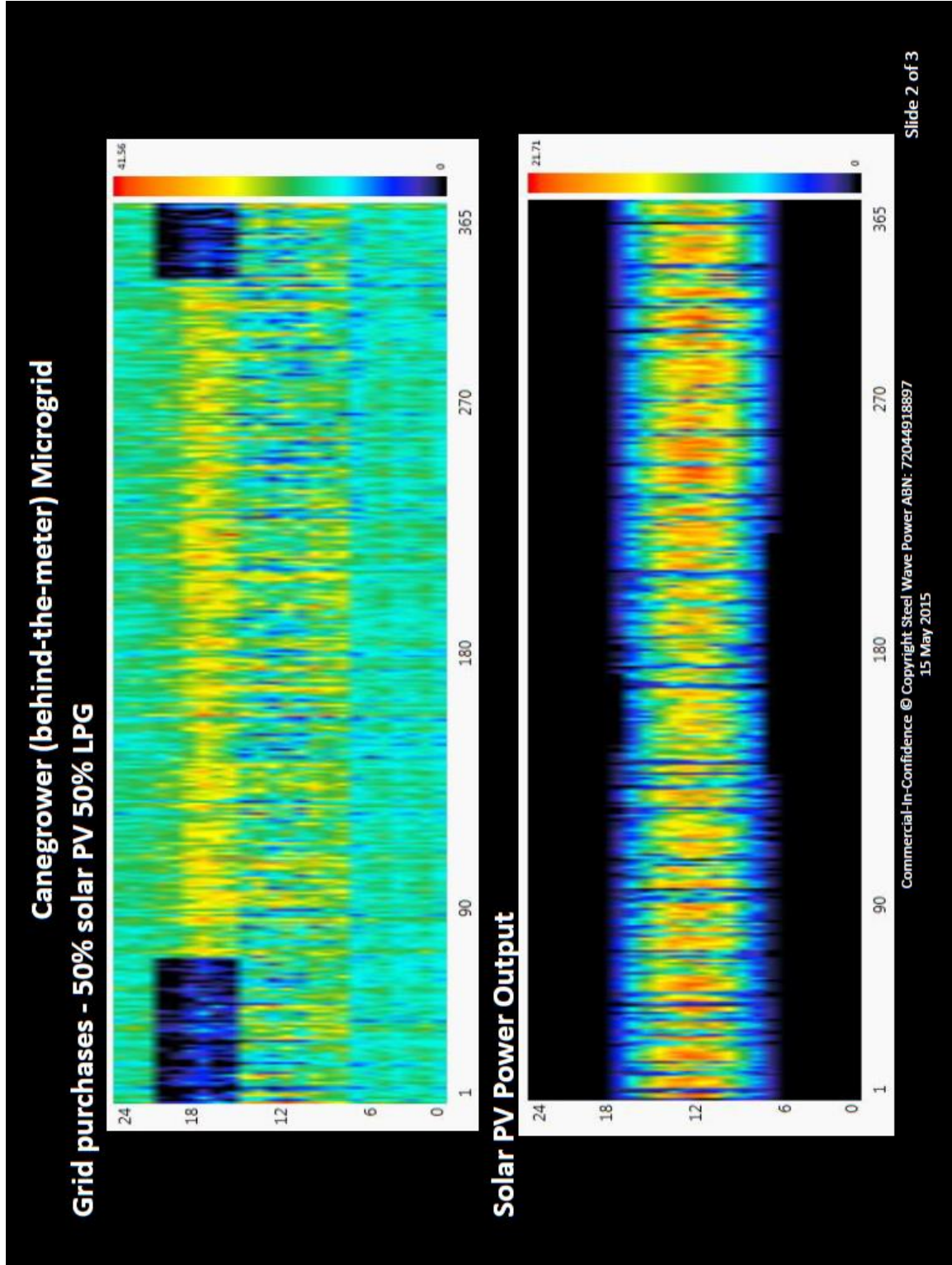
In relation to what Steel Wave Power was discussing implementing NER clause 6.6.4 for small-scale renewable incentive, Australian Energy Regulator has a greater knowledge and resources in this matter and References a), b) and c) under signature block of covering letter for Attachment 2. Steel Wave Power and allies won't progress Decentralised Energy Systems in Tasmania without banding that is structured as follows and avoids double dipping on customers:-

Green Scheme	Size Band
Small-scale Renewable Energy Scheme (SRES)	less than 100kW
NER clause 6.6.4 "small-scale incentive scheme"	between 100kW and 5MW
Large-scale Renewable Energy Target (LRET)	greater than 5MW

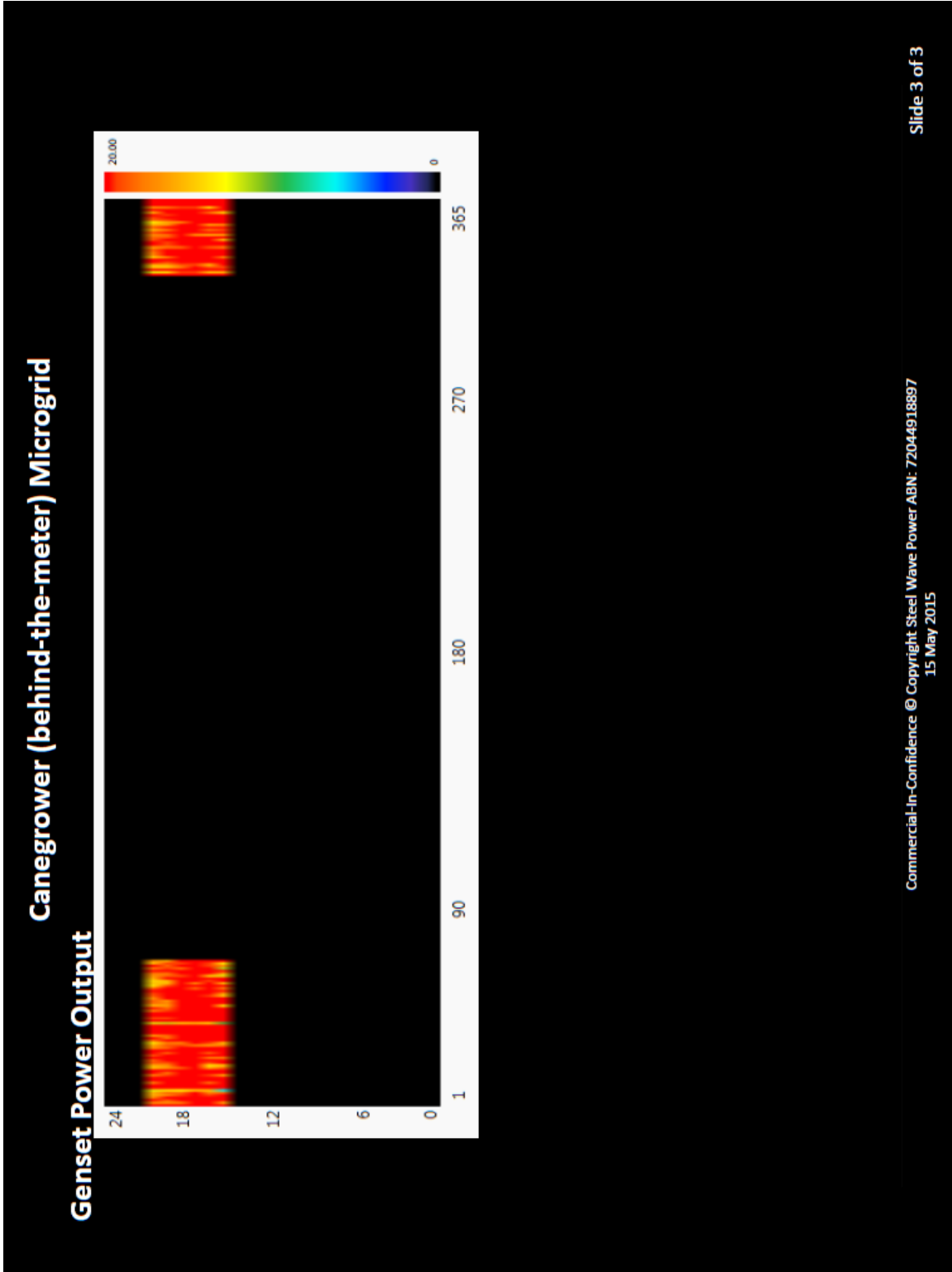
Hydro Tasmania's solution for King Island and Flinders Island is centralised. It is a key differentiator between philosophy of Proprietor of Steel Wave Power and powers that be in Hydro Tasmania that developed this diagram for Flinders:-

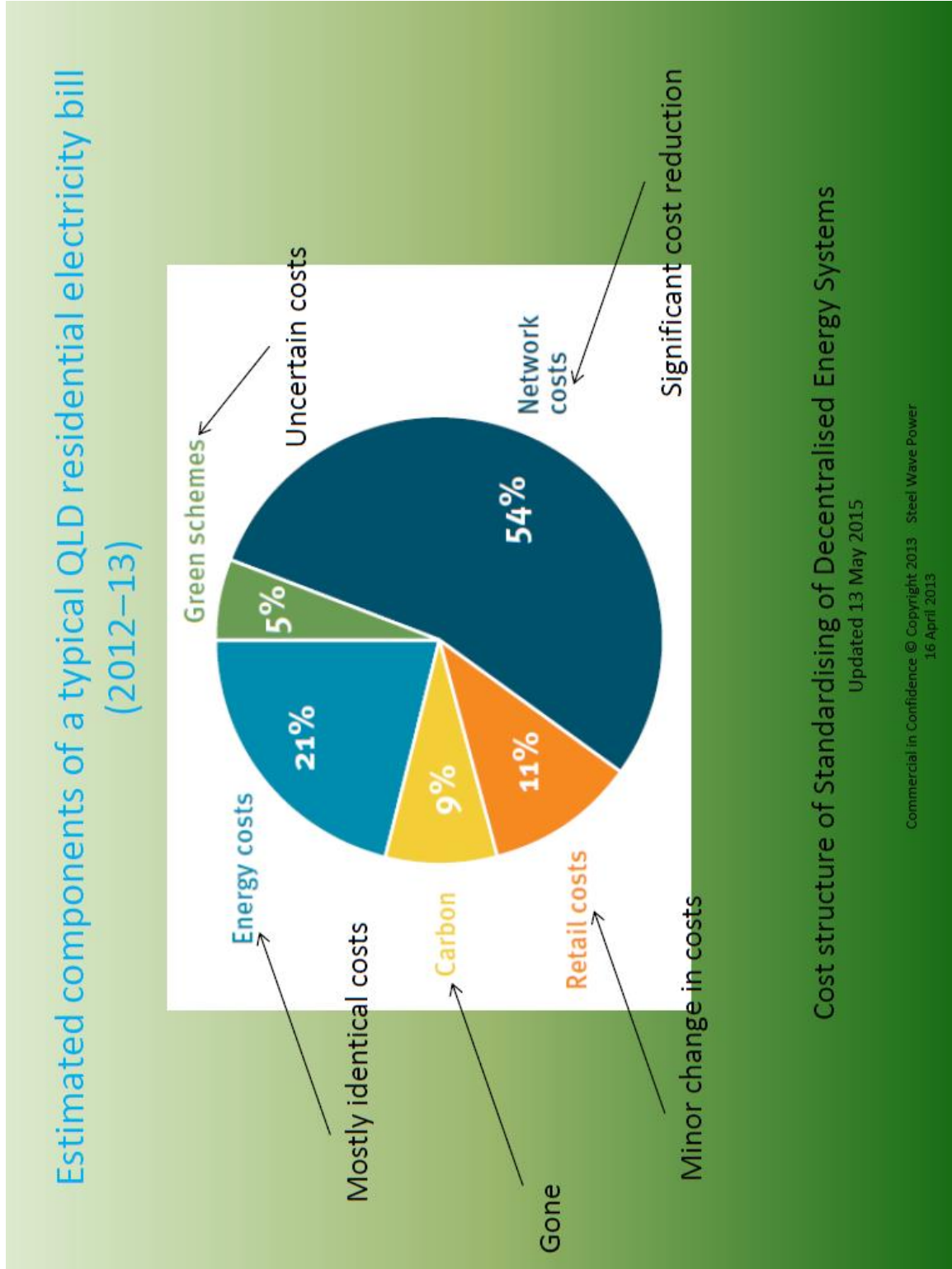






BOM declaring new El Nino for Australia has relevance in certain regions in Solar PV Power Output for “quite a substantial El Nino event”.





Steel Wave Power methodology was to compare against “Network costs” since awaiting QCA’s tariffs to include remaining costs e.g. energy, retail where “Network costs” means “SToUE (100% LRMC) tariff”.



## The introduction of mandatory compliance programmes

Steel Wave Power is concerned about the cost of implementing the mandatory compliance programmes arises from Queensland precedent with zero export devices that have developed a commercial eco-system in Queensland.

Steel Wave Power is not aware of any such zero export devices imposed within Essential Energy's jurisdiction. When Steel Wave Power hears DNSP and their preferred suppliers talking about mandatory compliance with zero export devices, Steel Wave Power is wary about whose wealth they are creating: yours or theirs.

Verification costs also can easily become a legal and widespread scam where regulator and rule makers haven't done enough to shut down loopholes that DNSP employees have exploited with management sanction. This is not one or two rogues. If it were, Australian Energy Regulator could act and move on.



# Zero Export Training Day

To our valued customers in NSW, SA, ACT, & VIC, Supply Partners will have training tailored to your network providers regulations in the near future.

Please register to receive the presentation slides for this important information regarding zero export controls, as the Power One and SMA Soft Ramp Controller presentations are relevant to all states.

## INVITATION

IF YOU CANT ATTEND OR IF YOU ARE INSTALLING OUTSIDE OF THE ENERGEX AND ERGON REGIONS, REGISTER YOUR EMAIL TO RECEIVE THE PRESENTATION SLIDES

### The Information Session will cover:

- Installing APPROVED Protection Relay Devices to satisfy Zero Export.
- The importance of Soft Ramp Controllers to increase production and prolong inverter life, by avoiding shutdowns.
- Properly integrating Power One and SMA Soft Ramp Controllers.
- The latest details on ENERGEX's and ERGON's approval process.

### Hear from Industry experts:

- Peter Britten, Technical Director, Supply Partners.
- Technical Expert, Com AP manufacturer of the IntelliPro PV (ENERGEX approved Protection Relay Device).
- Product Manager, IPD.
- Joseph Kassouf, Technical Sales Engineer, Power One.
- Adrian Ho, Technical Service Engineer, SMA Australia.

WHEN:  
WHERE:  
TIME:  
DURATION:  
REGISTER BY 13 JUNE:

Wednesday 18th of June, 2014  
Supply Partners Head Office,  
48 Jijaws St Sumner, 4074  
3.00pm  
2hours  
judd@supplypartners.com.au





# Zero Export Training Day

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### HEAR FROM INDUSTRY EXPERTS

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- **Product Manager**, *IPD*.
- **Joseph Kassouf**, Technical Sales Engineer, *Power One*.
- **Adrian Ho**, Technical Service Engineer, *SMA Australia*.

### ADDITIONAL GUEST SPEAKER

- **Trent Batchelder**, General manager, *Zero Export Controllers*

### AVAILABLE FOR QUESTION TIME

- **John Lansley**, Network Technology Development Engineer, *ENERGEX*

### THE INFORMATION SESSION WILL COVER

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### TRAINING SESSION

**WHEN:** Wednesday 18th of June, 2014  
**WHERE:** Supply Partners Head Office, 48 Jijaws St Sumner, 4074  
**TIME:** 3.00pm  
**DURATION:** 2hours  
**RSVP BY 13 JUNE:** [judd@supplypartners.com.au](mailto:judd@supplypartners.com.au)

### POST EVENT & STATE OF ORIGIN DRINKS

**WHEN:** Wednesday 18th of June, 2014  
**WHERE:** Statler & Waldorf, 25 Caxton St, Paddington, 4064  
**TIME:** 6.30pm till late (No RSVP required)





## **The timetable for implementation of the programme.**

Proprietor of Steel Wave Power was an employee of Hydro Tasmania from 1997 through to 2010 when a redundancy was enforced during staff reductions. In

- a) Hydro Electric Corporation, then
- b) Hydro Tasmania, Transend Networks and Aurora Energy, then
- c) Hydro Tasmania, Tasmanian Networks Pty Ltd.

we are talking about the culture of an industry that seemed to not care about how them making money estranged community from which they were making money.

Tasmania is very vulnerable to phenomena of existing customers going off-grid due to their rugged resilience not commonly found amongst metropolis people.

On North Stradbroke Island, I have seen Energex re-ingratiate themselves using their deep pockets (compared to an embedded generator developer) to an estranged community triggered by a rather mild 'anti-Energex' submission from Steel Wave Power to Queensland's 30-year electricity strategy discussion paper. <https://www.dews.qld.gov.au/policies-initiatives/electricity-sector-reform/submissions-received>

Basically, Queensland majority will is to burn coal rather than utilise renewables.

Basically, Tasmania's majority will is to utilise renewables rather than burn coal.

Proprietor of Steel Wave Power resides on North Stradbroke Island yet retains close linkages with fellow electricity industry professionals and para-professionals in Tasmania in attaining Principal Consultant in Hydro Tasmania.

From 2010-2014, many excellent electricity industry professionals were shed from Hydro Tasmania, Transend Networks and Aurora Energy. Incumbent Tasmanian Government understands that population stagnation and talent drain is stagnating Tasmanian economy. There is a window of opportunity to establish new connection agreements correlated to 60/40 split (Hydro Tasmania / Community Resilience Microgrids) for just regional Tasmanian townships by Decentralised Energy Systems with hot-standby power for very large scale events. When fitting, proprietor of Steel Wave Power would return to Tasmania.

In terms of social licence to build Decentralised Energy Systems on "remote" Bruny Island and Bicheno in Tasmania, three areas studied were unfeasible to co-locate generation and energy storage.